

## Reciprocating Piston Drive Mechanism

### Abstract

The invention relates to a reciprocating piston drive mechanism, especially for a reciprocating piston vacuum pump, comprising a housing (2), a cylinder (3) embodied in said housing, a piston (4) moving back and forth in the cylinder and an electromagnetic drive for the piston (4) that has an electromagnet (11) on the stator side and at least one permanent magnet (18, 19) on the piston side. In order to increase service life of said drive mechanism, it is proposed that permanent magnets (15, 16) be also provided on the stator side and that the permanent magnet(s) (18, 19) of the piston (4) and the permanent magnets (15, 16) of the stator be configured and disposed in such a way that the piston (4) adopts a substantially central axial position in the idle state.

(drawing figure 1)

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